

## Chronic Disease Indicators: Indicator Definition



### Hospitalization for congestive heart failure among Medicare-eligible persons aged $\geq 65$ years

Category:	Cardiovascular Disease
Demographic Group:	Medicare-eligible resident persons aged $\geq 65$ years.
Numerator:	Hospitalizations (not unduplicated*) with principal diagnosis of International Classification of Diseases (ICD)-9-CM code 428.0 among Medicare-eligible resident persons aged $\geq 65$ years.
Denominator:	Residents aged $\geq 65$ years who were eligible for Medicare Part A benefits on July 1 of the calendar year, excluding members of health maintenance organizations.
Measures of Frequency:	Annual number of hospitalizations. Annual hospitalization rate — crude and age-adjusted (standardized by the direct method to the year 2000 standard U.S. population, distribution 18†) — with 95% confidence interval.
Time Period of Case Definition:	Calendar year.
Background:	Congestive heart failure (CHF) is the leading principal diagnosis for Medicare hospital claims.
Significance :	Approximately 75% of persons with CHF have antecedent hypertension. During 1979–1996, hospitalizations for CHF increased by 130%. Substantial differences in CHF death rates and preventive measures exist by race, age, sex, place of residence, and other demographic factors.
Limitations of Indicator:	Because congestive heart failure is a chronic disease that can have a long preclinical phase, years might pass before changes in behavior or clinical practice affect population morbidity and mortality.
Data Resources:	Centers for Medicare and Medicaid Services (CMS) Part A claims data (numerator) and CMS estimates of the population of persons eligible for Medicare (denominator).
Limitations of Data Resources:	Diagnoses listed on hospital discharge data might be inaccurate. Practice patterns and payment mechanisms could affect decisions by health-care providers to hospitalize patients. Indicator is limited to Medicare-eligible population.
Healthy People 2010 Objectives:	12-6: Reduce hospitalizations of older adults with congestive heart failure as the principal diagnosis. (12-6a is specific for adults aged 65–74 years; 12-6b is specific for adults aged 75–84 years; 12-6c is specific for adults aged $\geq 85$ years.)

\* The term not unduplicated refers to the fact that one person might account for multiple admissions. † See Klein RJ, Schoenborn CA. Age adjustment using the 2000 projected U.S. population. Hyattsville, MD: US Department of Health and Human Services, CDC, National Center for Health Statistics, 2001. Healthy people 2010 statistical notes, no. 20. <http://www.cdc.gov/nchs/data/statnt/statnt20.pdf>